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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,096	01/16/2004	Lalit K. Mestha	116588	4982
27074	7590	01/16/2007		
OLIFF & BERRIDGE, PLC. P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER LEE, WILSON	
			ART UNIT	PAPER NUMBER
			2163	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/16/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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OfficeAction27074@oliff.com
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Office Action Summary

Application No.

10/758,096

Applicant(s)

MESTHA ET AL.

Examiner

Wilson Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 7-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 6 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4-30-04, 3-11-05</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to argument on restriction requirement

Applicant elects Group I, claims 1-6 with traverse. Claims 7-14 have been withdrawn from consideration. Applicant asserts that the search and examination of an entire application can be made without serious burden, therefore examiner must examine it on the merits.

Examiner respectfully disagrees.

The full guidelines stated in the MPEP regarding search burden are set forth at 803, where the MPEP states: "For purposes of the initial requirement, a serious burden on the examiner may be prima facie shown by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP 808.02. At 808.02, the MPEP states: "(C) A different field of search: where it is necessary to search for one of the inventions in a manner that is not likely to result in finding art pertinent to the other invention(s) (e.g. searching different classes/subclasses or electronic resources, or employing different search queries, a different field of search is shown, even though the two are classified together. The indicated different field of search must in fact be pertinent to the type of subject matter covered by the claims. Patents need not be cited to show different fields of search."

As discussed in the restriction requirement, the application indeed contains more than one invention employing different fields of search and separate classifications.

Moreover, the issue of burden merely plays a minor role for the basis to support the restriction requirement. Since it has been concluded that the pending application

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includes more than one separate distinctive and independent invention, the restriction is therefore proper.

In particular, it appears that applicant believes the issue of burden only arises from the search of prior art and examination of the application in determining the patentability of the claimed invention. However, applicant is respectfully reminded that conducting a search on application merely plays a small part of examining the invention. Burden may also arise from prosecuting multiple inventions in a single application. Such a type prosecution merely leads to complication in patentability determination that may ultimately sacrifices the quality of patentability determination. In view of this reason, a restriction imposed is clearly proper.

The requirement is still deemed proper and is therefore made **FINAL**.

Claim Objection

Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

"A method of generating a reference database" in claim 1 is equivalent to "a reference database generated by a method" in claim 5.

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (US 2003/0009293).

Regarding Claim 1, Anderson discloses a method of generating a reference database for determining a reflectance spectrum (See paragraph 0151), comprising:

- establishing a plurality of clusters (See paragraph 0182);
- identifying, for each training sample of a plurality of training samples (tissue sample) (See paragraphs 0040, 0090, 0148, 0253, 0256 and abstract), a most appropriate cluster among the plurality of clusters (See paragraph 0182) and assigning each training sample to the most appropriate cluster (See paragraphs 0179-0185), each training sample correlating a reference spectrum (See paragraphs 0151, 0192-0203) with a corresponding plurality of normalized illuminant sensor outputs for reference colors (image) (See paragraphs 0143, 0144).

Regarding Claim 2, Anderson discloses a cluster analysis for measuring and multidimensional scaling Euclidean and average Euclidean (See paragraphs 0150, 0200) that inherently obtains a Euclidean distance to each of the cluster centroids, wherein the most appropriate cluster is determined to be the cluster associated with the

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cluster centroid having the shortest Euclidean distance since this analysis is well known.

Centroid and Euclidean simultaneously exist.

Regarding Claim 4, Anderson discloses that the establishing the plurality of clusters comprises establishing a plurality of cluster centroids, the cluster centroids being established through vector quantization (See paragraphs 0150, 0200 and Figures 3-6).

Regarding Claim 6, Anderson discloses a storage medium on which is recorded a program for implementing the method (See paragraphs 0138-0145, 0178).

Claims 1, 2, 4, 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Chee et al. (US 2003/0157504).

Regarding Claim 1, Chee discloses a method of generating a reference database for determining a reflectance spectrum, comprising:

- establishing a plurality of clusters (See Figure 6);
- identifying, for each training sample of a plurality of training samples (bioactive agents) (See paragraphs 0009, 0024), a most appropriate cluster among the plurality of clusters and assigning each training sample to the most appropriate cluster (See paragraphs 0004, 0008, 0216, 0221, 0222, 0225), each training sample correlating a reference spectrum (See paragraphs 0220, 0232, 0323) with a corresponding plurality of normalized illuminant sensor outputs for reference colors (See paragraphs 0180).

Regarding Claim 2, Chee discloses the establishing the plurality of clusters comprises establishing a plurality of cluster centroids; and the identifying of the most

appropriate cluster comprises obtaining, for each training sample, a Euclidean distance to each of the cluster centroids, wherein the most appropriate cluster is determined to be the cluster associated with the cluster centroid having the shortest Euclidean distance (See paragraphs 0221-0228 and Figure 6).

Regarding Claim 4, Chee discloses that the establishing the plurality of clusters comprises establishing a plurality of cluster centroids, the cluster centroids being established through vector quantization (See Figure 6 and paragraphs 0073, 0218, 0307, 0326, 0327, 0331).

Regarding Claim 6, Chee discloses a storage medium on which is recorded a program for implementing the method (See paragraphs 0227, 0228, 0261).

Allowable subject matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

IDS

The Lin reference cited in IDS has been withdrawn from consideration because applicant fails to provide the year of the publication.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wang (6,917,443) discloses a composite halftone screens with stochastically distributed clusters or lines. Labrenz (6,333,501) discloses methods, apparatus, and articles of manufacture for performing spectral calibration. Wang

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(6,252,679) discloses a composite halfone screens with stochastically distributed clusters or lines. Stolfo (5,748,780) discloses a method and apparatus for imaging image processing and data compresion.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to the application may be submitted by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

1/9/07